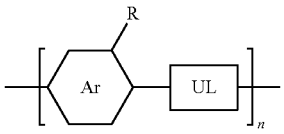
charged functionalities, where R^2, R^3, and R^4 are independently selected from a hydrocarbyl group or an ethylene glycol-based group; R can be any functional group; and n is an integer between about 10 and about 1000.

20. The method of claim **4**, wherein the conjugated polymer has the formula:



where UL is an unsaturated linker such as an alkyne or optionally substituted alkene unit that connects substituted arenes, substituted heteroarenes, unsubstituted arenes, unsubstituted heteroarenes, or a combination thereof; R is selected from the group consisting of: variable length, linear or branched, aliphatic ethylene glycol chains or halogen-containing or heteroatom-containing chains of length n, where n is an integer value, unsubstituted hydrocarbyl, substituted hydrocarbyl, unsubstituted aryl, substituted aryl, unsubstituted heteroaryl, substituted heteroaryl, unsubstituted hydrocarbylene, hydrocarbyl, and substituted hydrocarbylene, hydrocarbyl, R^2F, R^2Cl, R^2Br, R^2I, R^2CN, $—R^2$, $—R^2OH$, $—R^2OR^3$, $—R^2COOH$, $—R^2COOR^3$, $—R^2NH_2$, $—R^2NHR^3$, $R^2NR^3R^4$, $—R^2SO_3^-$, $—R^2NH_3^+$, or $—R^2COO^-$, and other charged functionalities, where R^2, R^3, and R^4 are independently selected from a hydrocarbyl group or an ethylene glycol-based group; R can be any functional group; and n is an integer between about 10 and about 1000.

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